NORTHERN GIANT HORNET STAKEHOLDER UPDATE #22.09 – SEPTEMBER 21, 2022

CITIZEN SCIENTIST UPDATE

Citizen scientists are hard at work monitoring bottle traps. They have registered over 370 traps in Washington, servicing traps and sampling insects for almost 12 weeks. WSDA is extremely thankful for everyone's efforts.



Photo submitted by citizen scientist Lynn of their bottle trap!

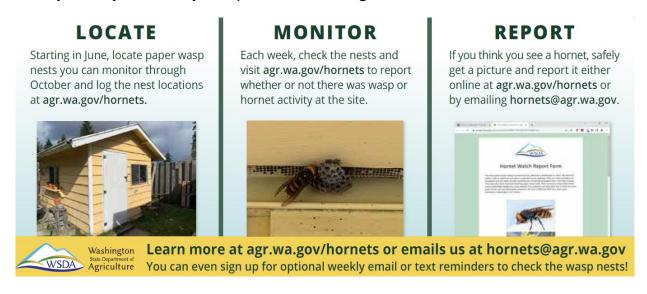
Adopt A Wasp Nest

In June, WSDA launched a new campaign asking citizens to locate paper wasp nests and monitor their activity weekly. Over the last two years, both WSDA staff and the public have noticed northern giant hornets repeatedly attacking paper wasp nests. The project follows three steps: locate, monitor, and report.

Locate nests that you have access to and can monitor through October. Log the nest locations online.

Monitor the nests each week, and observe what, if any, hornet or wasp activity is happening at the nest. Log your check-in online.

Report if you think you spot a northern giant hornet.



USDA/EPA POLLINATOR STATE OF SCIENCE WORKSHOP

On September 14, APHIS presented on Emerging Pests at the third annual USDA/EPA Pollinator State of the Science Workshop. The APHIS presentation covered the northern giant hornet response in Washington state as well as research on the Tropilaelaps mite. The workshop serves as a forum to discuss science and research priorities related to pollinators in agriculture. Over the two-day workshop, presentations covered the five focus areas outlined in the 2018 Farm Bill: Status and Trends, Habitat and Nutrition, Environmental Stressors, Pests and Pathogens, and Genetics and Pollinator Biology. This year, the primary focus of the meeting was weather and temperature stress as an environmental stressor.

NGH AT BELLINGHAM SEAFEST

WSDA's Pest Program Biologist Nathan Roueche spent his Saturday teaching community members about the northern giant hornet and the

response project. Attendees enjoyed seeing hornets and nest combs close up.

EXPERIMENTAL TRAPPING

WSDA collaborates yearly with USDA to test experimental hornet traps. They investigate various lures, or hornet attractants. The hope is to create a bait the hornets may be more attracted to than the proven orange juice and rice wine mixture.

Scientists are sampling four different lures. Some traps are emitting honey bee odors. A few traps contain bacillus volatiles, which are known to attract another closely related hornet. The last bait is two variations of hornet alarm pheromone. The pheromone is a foraging or defense compound the hornet can produce to signal assistance from hornets.



FRASS SAMPLING

What's all the frass? It's actually an insect's waste product!

The Pest Program molecular lab recently sequenced over 300 frass pellets obtained from Nest 4. They obtained over 300,000 quality reads back. The sequencing method used allows the program to identify what organisms the hornets in Washington are preying upon. Results are still being analyzed, but similar to other nests sequenced, the bald faced

hornet is high on the menu. <u>Click this link to read a blog about initial findings.</u>





Left: Hornet cell comb being opened for frass extraction | Right: Extracted frass

NEW DETECTIONS

There have been no new detections for AGH. WSDA and USDA are monitoring about 900 traps in Whatcom County. WSDA is also encouraging you to be on the lookout and report potential sightings. Insects can end up anywhere, even street lights, so stay alert!

- Report using the <u>Hornet Watch Report Form</u>
- Email hornets@agr.wa.gov

STAY CONNECTED

WSDA is dedicated to working with the public to provide information on northern giant hornets.

- View <u>past news releases</u>, <u>blogs</u>, <u>and Pest Program updates</u> about northern giant hornet.
- Join the Northern giant hornet Facebook group.
- Join the <u>Pest Program email listserv</u>.
- Follow WSDA on Facebook, Instagram, YouTube, and Twitter.